

# Fact Sheet



## *For General Permit Registration Under 45CSR30 and Title V of the Clean Air Act*

Permit Number: R30-NGGP-2007-03900047

Application Received: **December 5, 2001**

Plant Identification Number: **03900047**

Permittee: **Columbia Gas Transmission**

Facility Name: **Lanham Compressor Station**

Mailing Address: **1700 MacCorkle Avenue, SE**

**Charleston, WV 25314**

Issued: November 13, 2007

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Physical Location: Rocky Fork, Kanawha County, West Virginia  
UTM Coordinates: 465.60 km Easting • 4258.60 km Northing • Zone 17  
Directions: Traveling I-64, exit at Cross Lanes and turn right onto State Route 622. Continue on Route 622 to the station which is located at the intersection of State Route 622 and Secondary Route 7.

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### **Facility Description**

The Lanham Station is a natural gas transmission facility covered by (SIC) 4922. The station has the potential to operate seven (7) days per week, twenty-four (24) hours per day. The station consists of six (6) 1,100- HP and two (2) 2,700-HP reciprocating engines, one (1) 11,100 -HP turbine (including a wastewater injection system) and numerous storage tanks of various sizes. On-site support equipment includes one (1) 3.84 MMBtu/hr heating system boiler, one (1) 35-HP natural gas fired air compressor, one (1) 0.25 MMBtu/hr fuel gas line heater and two (2) natural gas fired electrical generators--one rated at 306-HP and another at 275-HP.

### **Emissions Summary**

Plantwide Emissions Summary [Tons per Year]		
Criteria Pollutants	Potential Emissions	2005 Actual Emissions
Carbon Monoxide (CO)	589.9	339.6

Nitrogen Oxides (NO <sub>x</sub> )	2,093.2	1242.6
Particulate Matter (PM <sub>10</sub> )	18.0	10.0
Total Particulate Matter (TSP)	18.0	10.0
Sulfur Dioxide (SO <sub>2</sub> )	0.8	0.5
Volatile Organic Compounds (VOC)	69.1	43.9
<i>PM<sub>10</sub> is a component of TSP.</i>		
<b>Hazardous Air Pollutants</b>	<b>Potential Emissions</b>	<b>2005 Actual Emissions</b>
Formaldehyde	24.9	13.5
Other HAPs	5.3	0.01
Total HAPs	30.2	13.5
<i>Some of the above HAPs may be counted as PM or VOCs.</i>		

### Title V Program Applicability Basis

This facility has the potential to emit 589.9 tons/yr of CO, 2093.2 tons/yr of NO<sub>x</sub>, 24.9 tons/yr of Formaldehyde and 30.2 tons/yr of Total HAPs. Due to this facility's potential to emit over 100 tons per year of criteria pollutant, over 10 tons per year of a single HAP, and over 25 tons per year of aggregate HAPs, Columbia Gas Transmission Corporation is required to have an operating permit pursuant to Title V of the Federal Clean Air Act as amended and 45CSR30.

### Legal and Factual Basis for Permit Conditions

The State and Federally-enforceable conditions of the Title V Operating Permits are based upon the requirements of the State of West Virginia Operating Permit Rule 45CSR30 for the purposes of Title V of the Federal Clean Air Act and the underlying applicable requirements in other state and federal rules.

This facility has been found to be subject to the following applicable rules:

Federal and State:	45CSR2	Indirect Heat Exchangers
	45CSR6	Open burning prohibited.
	45CSR10	SO <sub>2</sub> Emissions
	45CSR11	Standby plans for emergency episodes.
	45CSR13	
	WV Code § 22-5-4 (a) (14)	The Secretary can request any pertinent information such as annual emission inventory reporting.
	45CSR30	Operating permit requirement.
	40 C.F.R. Part 61	Asbestos inspection and removal
	40 C.F.R. Part 82, Subpart F	Ozone depleting substances
State Only:	45CSR4	No objectionable odors.
	45CSR17	Particulate Fugitive

Each State and Federally-enforceable condition of the Title V Operating Permit references the specific relevant requirements of 45CSR30 or the applicable requirement upon which it is based. Any condition of the Title V permit that is enforceable by the State but is not Federally-enforceable is identified in the Title V permit as such.

The Secretary's authority to require standards under 40 C.F.R. Part 60 (NSPS), 40 C.F.R. Part 61 (NESHAPs), and 40 C.F.R. Part 63 (NESHAPs MACT) is provided in West Virginia Code §§ 22-5-1 *et seq.*, 45CSR16, 45CSR15, 45CSR34 and 45CSR30.

### Active Permits/Consent Orders

Permit or Consent Order Number	Date of Issuance	Permit Determinations or Amendments That Affect the Permit ( <i>if any</i> )
None		

Conditions from this facility's Rule 13 permit(s) governing construction-related specifications and timing requirements will not be included in the Title V Operating Permit but will remain independently enforceable under the applicable Rule 13 permit(s). All other conditions from this facility's Rule 13 permit(s) governing the source's operation and compliance have been incorporated into this Title V permit in accordance with the General Requirement Comparison Table B which may be downloaded from DAQ's website.

### Determinations and Justifications

The boiler and heater at the facility are less than 10 mmBtu/hr and gas fired; hence Section 4.0 of the Title V General Permit is applicable to the boiler and heater.

### Non-Applicability Determinations

This facility is a major source of HAPs. However, according to sections g, h and j below no MACT is applicable to this facility.

The following requirements have been determined not to be applicable to the subject facility due to the following:

- a. 40 C.F.R. 60 Subpart GG; *Standards of Performance for Stationary Gas Turbines* - There is one turbine at Lanham station which was installed in 1970. No modifications to the turbine have occurred since the original installation. 40 C.F.R. 60 Subpart GG is not applicable because the engine was installed before October 3, 1977.
- b. 40 C.F.R. 60 Subparts K,Ka; *Standards of Performance for Storage Vessels for Petroleum Liquids* - All tanks at Lanham station are below 40,000 gallons in capacity.
- c. 40 C.F.R. 60 Subpart Kb; *Standards of Performance for Volatile Organic Liquid Storage Vessels* - All tanks at Lanham station are below 75 m<sup>3</sup> in capacity.
- d. 40 C.F.R. 60 Subpart KKK; *Standards of Performance for Equipment Leaks of VOC From Onshore Natural Gas Processing Plant* - Lanham station is not engaged in the extraction or fractionation of natural gas liquids from field gas, the fractionation of mixed natural gas liquids to natural gas products, or both.
- e. 45CSR21; *To Prevent and Control Air Pollution from the Emission of Volatile Organic Compounds*: All storage tanks at Lanham station are below 40,000 gallons in capacity which exempts the facility from 45 CSR§21-28. Lanham station is not engaged in the extraction or fractionation of natural gas which exempts the facility from 45 CSR§21-29.
- f. 45CSR27; *To Prevent and Control the Emissions of Toxic Air Pollutants*: Natural gas is included as a petroleum product and contains less than 5% benzene by weight. 45CSR§27-2.4 exempts equipment "used in the production and distribution of petroleum products providing that such equipment does not produce or contact materials containing more than 5% benzene by weight."

- g. 40 C.F.R. 63 Subpart ZZZZ; *RICE MACT* - All the engines are 2-cycle, lean burn or less than 500 HP; Hence Rice MACT is not applicable to this facility even though this facility is a major source of HAPs.
- h. 40 C.F.R. 63 Subpart YYYY; *Turbine MACT* - There is one turbine at Lanham station which was installed in 1970. No modifications to the turbine have occurred since the original installation; hence it is an existing turbine and not subject to this MACT.
- i. 40 C.F.R. 60 Subparts Dc; *Standards of Performance for Steam Generating Units* – The heating system boiler and line heater at this facility are both less than 10 MMBtu/hr; Hence Subpart Dc is not applicable.
- j. 40 C.F.R. 63 Subpart DDDDD; *Boiler MACT* – The heating system boiler and line heater at this facility use gaseous fuel and are less than 10 MMBtu/hr; Hence Boiler MACT is not applicable to this facility even though this facility is a major source of HAPs. Boiler MACT regulations were vacated on July 30<sup>th</sup> 2007 in accordance with the D.C. Circuit of Appeals June 8<sup>th</sup> 2007 ruling.

Since the last Title V modification WVDEP has determined that 45CSR10 does not apply to gas fired engines.

40 CFR 64 - Engines do not have any add-on control; therefore, in accordance with 40 C.F.R § 64.2(a), CAM is not applicable to this facility. Heating System Boiler is not a major source; therefore, CAM is not applicable.

#### **Request for Variances or Alternatives**

None

#### **Insignificant Activities**

Insignificant emission unit(s) and activities are identified in the Title V application.

#### **Comment Period**

Title V general Permit has already been advertised and finalized. This fact sheet for facility registration is written for the file. This fact sheet states which rules are applicable to the particular facility and which rules are not applicable.

#### **Procedure for Requesting Public Hearing**

N/A

#### **Point of Contact**

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Division of Air Quality  
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#### **Response to Comments (Statement of Basis)**

N/A